Chapter 11

Posttraumatic Stress Disorder, Trauma, and Culture

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Every view of the world that becomes extinct, every culture that disappears, diminishes a possibility of life.

—*Octavio Paz*

Each distinct culture represents a unique adaptation to a specific ecological context. Because threats to survival are a universal and central part of human adaptation, the necessity to evolve a response to such threats is universal. Cultures embody a group's shared wisdom about responding to threats to survival. In turn, threats to survival are at the core of traumatic experiences, as clarified by the most recent revision of the definition of posttraumatic stress disorder (PTSD) in DSM-IV (American Psychiatric Association 1994).

If the threats to life associated with psychological trauma are universal, then what varies across cultures is the perception of what type of threat is traumatic, the interpretation of the threat's meaning, the nature of the expression (presentation) of symptoms in response to such threats, the cultural context of the responses of traumatized people as well as the cultural responses by others to those who have been traumatized, and the culturally prescribed paths to recovery from experiencing life-threatening events. Finally, it is also useful to consider the processes by which the exposure of individuals and groups to traumatic events is made useful for the entire culture.

Systematic study of these variations should allow us to elucidate fundamental questions about the universality of PTSD and more generally about the natural history of the encounter of a human being with a catastrophic stressor. Furthermore, we may begin to gain insight into the ways in which trauma and its expression benefit the successful adaptation of populations, rather than limiting our understanding of PTSD to individuals.

Substantial research investments in understanding cultural aspects of trauma are urgently needed. Many traditional cultures are rapidly changing as they come into contact with other groups. Simultaneously, elders within these cultures are aging and dying. With the death of these men and women, precious records of the history and wisdom of these groups are irretrievably lost. Traditional healing methods, products of

thousands of years of cultural adaptation, are being lost from the world. Once gone, the ways in which these cultures dealt with the aftermath of war, rape, and natural disasters are not retrievable. Loss of this knowledge parallels the losses being suffered in ethnobotany, as both the cultural lore held by traditional healers and plant materials disappear (see Etkin 1993). Although some of the traditional knowledge to be gained is likely to be highly culturespecific, some may help reveal the curative principles that apply to traumatic experience across cultures.

In addition, the study of differences in prevalence across groups should help characterize the extent to which certain events are followed by a predictable ratio of symptomatic to nonsymptomatic individuals. We may discover that certain populations are resistant to the impact of trauma and do not become symptomatic with the same frequency as others. This discovery would permit research to try and isolate the components of culture that may be protective and to ask how they affect the experience of trauma.

Furthermore, the fact that culture change through culture contact is now ubiquitous means that we have an opportunity to evaluate the extent to which people who are not embedded in intact and cohesive cultures are affected in respect to their resilience after catastrophic events. It is fast becoming the norm for people today to identify with multiple cultures. Such multiple identifications have the potential to affect the cohesion of the self by increasing the cognitive complexity required to integrate the much larger number of elements that are referenced by multiple cultures. Certainly, the growth of culturally diverse populations requires that one navigate cultural environments that can change rapidly and unpredictably. In itself, this increases life stress and may decrease the capacity of people to screen and moderate the impact of catastrophic events. In contrast to the predictability and continuity that culture imposes on our lives, including the prescription of rules for obtaining and maintaining social support, living within multicultural environments is a challenge.

This chapter addresses the interaction of trauma and culture. First, an ecologically centered definition of culture is presented that highlights why it is important to consider the cultural context within which PTSD develops. Second, focusing on cultural variation in the response to trauma, a selective review of the literature on military veterans, refugees, and natural disasters is presented. Third, in view of the paucity of empirical research bearing directly on culture's impact on trauma, impediments to the study of culture and trauma are discussed, and an argument is made for the need for such studies. Fourth, a conceptual framework is given for evaluating the relationship of culture to PTSD, and salient research needs for this emerging area of PTSD inquiry are identified.

A Definition of Culture

Definitions of culture abound (see Rohner 1984; Triandis et al. 1980). For our purposes, it is particularly important to focus on those aspects of culture that are most directly related to furthering the capacity of people to survive. This is because traumas generally arise in response to events that are, or are perceived as being, life threatening. Traumas arise at critical points in the interaction of people and their ecological context.

An ecologically centered approach to anthropology has developed over the past 40 years as an extension of the functional school of anthropology. The core of this approach is summarized by Simpson (1962), who suggested that the study of cultural phenomena in an ecological context will advance understanding culture "in its adaptive aspects and consequent interaction with natural selection" (p. 106).

In a landmark anthropological study of the Maring tribe of New Guinea, which exemplifies this approach, Rappaport (1984) established that there were complex relationships between population size, religious ritual, the size of the pig population, garden size, and war. He showed that these apparently divergent variables formed together a complex of relations that were the underpinnings of the relationship of the population to the natural resources they sought to exploit, to their interactions with neighbors, and more generally to their adaptation and survival. In defining his perspective on culture, Rappaport wrote:

> A population may be defined as an aggregate of organisms that have in common certain distinctive means for maintaining a set of material relations with the other components of the ecosystem in which they are included. The cultures of human populations, like the behavior characteristics of populations of other species, can be regarded, in some of their aspects, at least, as part of the "distinctive means" employed by the population in their struggles for survival. (p. 6)

He further pointed out that although culture serves regulatory functions, these operations are not necessarily represented in the conscious ideology of the people. He pointed out in reference to the Tsembaga, the Maring group he studied, that "the operation of ritual as a regulating mechanism is not necessarily understood by the Tsembaga. . . . The Tsembaga themselves see the purposes of the rituals as having to do, rather, with the relations of people to various spirits—for the most part, those of deceased ancestors" (Rappaport 1984). Thus, although culture may be experienced as ideology by the population bound together by it, its ecological functions may be latent and unconscious among the members of the culture.

In Rappaport's view, culture is the set of regulatory functions performed by a population to further its adaptive and reproductive capacities in its environment. Among the Tsembaga, for example, although marriage is exogamous, wives are exchanged with groups across the river and over the mountain. Wives are not exchanged with groups sharing territorial boundaries. This pattern has the advantage of sending wives to groups with whom there are no territorial conflicts because of the lay of the land. This practice prevents tribes from pitting wives and in-laws against each other when territorial conflict leads to war. Thus, even the economic organization and territorial dispersion of these groups operate to reduce the high emotional costs (trauma) of war.

It is instructive that war among the Tsembagas arises as the result of two kinds of violence: 1) violence involving the rape or abduction of women and 2) circumstances in which there are direct conflict over resources (typically land or women). From this perspective, culture is the shared attitudes, beliefs, practices, and behaviors that coalesce a group in a common interest in maximizing adaptive and reproductive survival. Such a view is reinforced when one recognizes that culture originates in kinship groups that themselves are extensions of the family unit. Thus, cultural groups invest in the common task of survival because these investments increase the probability of reproductive success for members of the population and for its gene pool.

As part of that investment, individuals are willing to sacrifice themselves, on occasion, to increase the chances that their offspring and kin will survive and propagate. Individuals also take on a range of behaviors, as well as internal representations, that identify them as part of the cultural group and define their fate as common with the group's. These structures operate to reinforce reciprocal altruism, and sanctions of exclusion from the group are experienced as threats to survival.

Threats reflect two kinds of danger: 1) physical threats to one's survival and 2) threats to one's inclusion in the broader protection and benefits of a primary group. It is proposed that threats become traumatic as the result of a complex interplay between the limits of self-regulation and the regulatory supports of belonging to a culture. Self-regulation is the capacity of an individual to integrate the stressful aspects of a life-threatening experience through modulation and processing of its cognitive and physiological impacts. In turn, this capacity develops and is maintained in the context of social relations, which both in their internalized and interpersonal form act to further support such regulatory efforts.

Individuals participate in a communal set of relations to a territory and share in the necessity of moderating the impact of threat on survival. Culture is shaped by the limits and character of a territory. Conversely, culture itself becomes an ecological mediator of the relations of individuals

to the territory. Culture acts through the social creation of prototypes (Rosch 1975; Rosch and Lloyd 1978), which are commonly recognized within a cultural group as representing "the expected, proper, and socially inclusive" way to behave in given situations. Prototypes are represented through both physical and social constructs, which give external representation in a highly distilled way to what the group's history and values are. They can be pointed to as models for individuals to emulate. Although these prototypes are always powerful, they are endowed with extraordinary valence when survival contexts are involved. The prototypes are not fixed and are subject to cultural revision to reflect culture learning. An example of a prototype would be when a mother points out to her child a way in which a good child behaves, while pointing out the way a bad child behaves on another occasion.

The repeated interactions involved in forming these prototypes give rise to an internalized set of rules about proper responses that can be later applied to novel situations. This set of dynamic rules is the second way in which cultures create cohesion—that is, by instructing their members in the development of schemata (Mandler 1979, 1984; Rumelhart et al. 1986) serving to construe the world in a way consistent with the prototypes. Culture-based schemata result from the internalization of rules about the culture learned through the appreciation of the messages contained in the prototypes embedding the culture. Thus, prototypes exist as consensually accessible models, and schemata serve to organize new information as individualized replicates of the prototypic models. Schemata are dynamic and provide a means for cultural prototypes to be revised as a function of individual experience.

These dynamics also operate in less traditional cultures. However, as nations become larger and more complex, and societies change from relatively homogeneous population groups to complex aggregates of racial and cultural groups competing intrasocially for resources, the communality of shared investment, which is normally represented in clear culture-bound schemata and prototypes, is less clearly perceived. As a result, many of the functions of culture are no longer discharged effectively. Conflicts about equity become generalized, and investment in a common set of cultural assumptions is threatened. Indeed, in such circumstances, competition for resources would appear to dominate the social discourse and to take precedence over the sense of a shared common fate.

A Review of the Trauma and Culture Literature

The literature on traumatic distress and culture is at an early stage of development. Published articles reporting data on PTSD in a cultural context remain relatively few in number. The field's techniques remain

heterogeneous across trauma types, making it difficult to establish common findings. An important requirement, if we are to progress, is the development of agreed-on standards for assessment and the initiation of conceptually useful models to establish comparability of data across cultures. In this section of the chapter, I provide a focused review of several of the trauma subliteratures to illustrate the status of the field. Limits of space obviously make it impossible to be exhaustive.

War and Soldiers

We have little empirical data about the impact of war on civilians. We have even less data about the impact of war on civilians across cultures. One notable exception is a series of studies reported by Saigh (1984, 1985, 1988) in which he studied the impact of war exposure on the children of Beirut. These studies suggested substantial ability on the part of the children to absorb the negative impacts of war. An implication of these studies was that children are capable of integrating into their sense of the world extraordinary events such as bombings with less negative impact than we might have imagined. Further research studying the impact of war on civilians is needed beyond the data provided by the study of war refugees. Research on refugees cannot alone fully elucidate the impact of war on civilians because it confounds displacement, loss, and a range of other catastrophic stressors with other impacts.

What we know about the impact of culture on the adaptation of soldiers to war largely reflects ethnocultural differences among U.S. soldiers in the Vietnam conflict. This literature is beset by the conceptual difficulty of disentangling race and ethnicity from culture. It is further conceptually complicated by the need to remember that ethnocultural groups who may seem homogeneous often reflect substantial differences as a result of intragroup differences in cultural origins. For example, Asian-American groups in the United States are often treated as homogeneous when this is clearly inappropriate given multiple cultural origins even within groups distinguished by a common national origin (e.g., Chinese). Similar conceptual problems arise in considering Native Americans as if they were a single group when they represent several subcultures and groups.

The Legacies of Vietnam Study (Laufer et al. 1981), which was mandated by the U.S. Congress, documented the sequelae of war on the psychosocial adjustment of U.S. Vietnam veterans. Blacks reported experiencing symptoms of stress at twice the rate of whites (40% among blacks versus 20% among whites). In addition to experiencing stress at greater rates, blacks also were disadvantaged with respect to whites in regard to income, occupational status, and employment. It would be

easy to assume that these postmilitary service deficits among blacks compared with whites were a result of differences in premilitary adjustment. However, *this was not the case.*

In a thoughtful and sensitive review of assessment issues in the evaluation of minority veterans, Penk and Allen (1991) commented that "little was made of the contrast that minorities were equal in premilitary adjustment, but more disturbed in post military adjustment" (p. 46). In part to address some problems in the design of the Legacies of Vietnam Study, but also to evaluate the continuing effects of the Vietnam war, the U.S. Congress mandated a second study: the National Vietnam Veterans Readjustment Study (NVVRS) (Kulka et al. 1988). This study's leaders held themselves to extraordinarily high standards of psychiatric epidemiology.

However, early in the study's planning (before it was contracted) only specific congressional direction ensured that three minority groups (blacks, Hispanics, and women) were oversampled so that they could be meaningfully studied. The NVVRS found that whites had a rate of PTSD of 13.7%, blacks had a rate of 20.6%, and Hispanics had a rate of 27.9%. Furthermore, there was some suggestion that even at the individual symptom level, minorities had more severe disturbance. Beyond having higher rates of PTSD, blacks and Hispanics were reported to have greater social maladjustment as reflected in incarcerations, marriage problems, and drug and alcohol problems. When controlled for combat exposure, the statistical difference between blacks and whites disappeared. However, Hispanics remained at significantly greater risk for PTSD. These data suggested a greater risk for assignment of blacks to more severe combat.

Unfortunately, to date, not even the few questions in the NVVRS that queried minority experience have been analyzed. Nor did the NVVRS include data on Asian Americans, Americans of Polynesian descent, Native Americans, or Native Alaskans. Despite the paucity of empirical data, a number of authors have advanced conceptually useful analyses of possible sources for ethnic differences. Beyond this, authors have also invested effort in illuminating the phenomenological experience of minority veterans to support sensitivity to their plight and to promote effective assessment and treatment.

Parsons (1985) brilliantly described the internal struggle that blacks experienced in going to war in Vietnam. He pointed out that serving in Vietnam created an internal loyalty bind. For men who had experienced racism, often very directly, to suddenly be put in the position of risking their lives to protect the society that had abused them was extraordinarily stressful. In addition, the military service context itself had not suddenly become reformed and free of racism. Many minority soldiers felt greater sympathy for and identified more with the Vietnamese than

did white soldiers. As a result of this identification, which has been termed the "gook identification" (Lifton 1973), some minority soldiers felt a conflict in regard to side of the conflict on which they should really be fighting. The issue of with whom to identify, on the basis of anecdotal and case report data, appears to have also been particularly intense and salient for Asian Americans, Native Americans, and Polynesian Americans.

Hamada et al. (1988) were the first to provide a phenomenological analysis of the problems encountered by an Asian American. Hamada and colleagues noted that among the most poignant and disturbing memories of this man were memories of the Vietnamese pointing at him and indicating themselves, and then saying, "GI same-same." He had a particularly disturbing recollection of shooting at a woman and her daughter who had shot at him as he was using a bulldozer in the jungle. He had been able to respond with effective fire, killing both of them. To this day, he remembers being gripped by the physical similarities between the faces of his enemy and those of his mother and sister.

This man also recounted countless instances of being mistaken for the enemy and of being ridiculed for his style of speech or because he liked to eat Vietnamese food. He also recounted being singled out in basic training as an example of what a "gook" looked like, even as the recruits were being told that "the only good gook is a dead gook." Obviously, for this American soldier there were three distinct sources of traumatic stress: 1) the enemy's potential to harm him, 2) the potential to be mistaken as foe by friendly forces, and 3) confusion in identification and the resultant threat to social inclusion.

Loo (1993) reported on a case involving a Chinese American veteran whose experiences in Vietnam reflected similar themes. Loo and her colleagues (Race stress exposure scale and PTSD: Asian-American Vietnam veterans, unpublished research proposal, June 1994) are currently engaged in an attempt to further develop these themes. They are working to construct a race-related stressors scale to assist in identifying the extent to which men of Asian ethnicity experienced race-related stress. Loo has identified several dimensions of war stress related to one's ethnicity. Following Hamada et al. (1988) and developing their early ideas, she distinguishes between race-related stressors as variables that might have potentiated the negative impacts of military service and single or repeated instances of race-related stress that might have been inherently sufficient to qualify as traumatic and cause PTSD (for example, being nearly killed because of being mistaken for the enemy).

Current research on military service across ethnic lines is extremely scarce. The research data contained within the NVVRS have still to be fully mined. Furthermore, most conceptual thinking in the field, as well as the extant evidence, appears to be focused primarily on the question

of the impact of operating as a soldier in a multiethnic environment, wherein one may be both isolated and conflicted about one's ethnic identity. This research allows us to conceptualize some of the protective social factors that are conferred by being a member of a cohesive cultural-ethnic group. However, this work does not allow us to learn much about differences between ethnic groups in patterns of cultural adaptation to trauma.

How do we account for the cultural aspect of the finding that Hispanics have higher rates of combat-related PTSD, even when we control for combat exposure? Is this difference a result of greater emotional reactivity and expressiveness being contained in Hispanic cultures? Is it because of selection biases on admission to the military among that group that reflect psychosocial variables related to immigration rather than culture? The major task facing workers in this area of trauma is disentangling these and similar conceptual strands.

Despite these conceptual issues, the work of treating these men and women is a practical and immediate demand for many. It cannot wait for the long-range process of scientific clarification, nor can it wait, for example, for norms for the various psychological tests to become available for the different ethnic groups. Based on preliminary reports from Carlson et al. (1994), it appears that most PTSD measures can be used as if no adjustment were required. In the course of assessing combat experience, it is suggested that workers also ask the following questions:

1. How did ethnic and cultural identity influence combat assignments (i.e., the probability of risk as weighed against perceived social value)?
2. How were opportunities for social support (i.e., to belong) influenced?
3. To what extent did the patient felt isolated and potentially threatened? Examine directly issues of racism that were encountered by the soldier.

In the course of treatment, it is essential to recognize that issues bearing on the formation of identity include race and cultural identity in a socially ambivalent context. Failure to realize this usually results in the patient perceiving the therapist as repeating the same social ambivalence by pretending that race and culture matter not. In consequence, the treatment becomes less than authentic, and at worst it can be retraumatizing.

Refugees

The current literature on refugees is dominated by work on Southeast Asian peoples. There are a number of careful reviews to which the reader is referred (e.g., Jaranson 1991; Kinzie et al. 1990; Mattson 1993). Refugees are

extraordinarily traumatized groups. For example, Carlson and Rosser-Hogan (1994) described a group of Cambodian refugees, nearly half of whom had been physically assaulted, 60% of whom had a family member who had been killed, and 86% of whom met the criteria for PTSD. Carlson and Rosser-Hogan were surprised to find that refugees rated food shortage more distressing than the death of a close relative.

The reports describing exposure to trauma among refugees do not always agree on rates (e.g., Hinton et al. 1993; Kroll et al. 1989). There is dramatic consistency, however, in the finding that these are groups of people who experienced extremely severe stressors. Among the frequent experiences of refugees are as much as decades of war that frequently included abuse and torture, dangerous escapes, living in squalid refugee camps, abrupt loss of status and of familiar surroundings, losses of friends and relatives, and the stresses of cultural integration into a new home.

An important step in establishing more clearly the nature of the refugee experience is to develop tools to measure exposure more precisely. Such a step was taken by Mollica et al. (1992), who developed the Harvard Trauma Questionnaire as a means of systematically measuring exposure, as well as response to events. They were able to show high interrater reliability with respect to both event severity and response intensity. Although inconclusive, their study suggested the importance of recognizing that not all PTSD symptoms are equally applicable to measuring distress in their population. For example, the nightmare symptom failed to discriminate between high- and low-exposure groups.

In view of refugees' exposure to trauma, it is not surprising that most researchers report high rates of distress and pathology in these groups. For example, Williams and Westermeyer (1983) noted that approximately 50% of refugees across studies reported substantial distress. There appears to be a dose-response relationship as well: Mollica et al. (1987) reported that refugees diagnosed with PTSD had twice as many traumatic experiences as those without PTSD. Although there appeared to be some possible ethnic differences in susceptibility to distress, more careful studies have shown that these differences disappear when trauma exposure is held constant.

However, absence of these differences should not be taken to reflect a lack of cultural impact on trauma. This research area is still so early in its development that no major, fully controlled epidemiological studies have been reported. Nor have the key variables been systemically clarified. Equally important for our purposes, even the most careful studies have not delineated specific cultural influences on the experience of refugees.

The chief observations about cultural expectations have been made in the context of treatment. A number of authors reported on clinical

series that indicate that Southeast Asian people do benefit from treatment and that they tend to prefer relatively structured, relatively hierarchical relationships in treatment. The reader is also referred to Jaranson (1991) for a discussion of possible differences in drug response among Asian refugees. Finally, in view of the large numbers of affected members of these groups, Williams (1991) called for substantial investments in primary prevention.

Natural Disaster

There has been remarkable growth in the volume and sophistication of research on disasters (see Chapter 8 by Green). Green (1993) recently reviewed the cross-national literature on disaster, and the reader is referred to her cogent article for a more detailed review. De Girolamo (1993) provided a thoughtful analysis of disaster from the international perspective of the World Health Organization. Also notable have been the conceptual analyses provided by the Australian psychiatrist McFarlane (1987, 1988), whose work, based on the Australian bush fires, has stimulated the development of more sophisticated theoretical perspectives on disaster.

Work on disaster across cultural lines is important because as Lima et al. (1991) pointed out the U.S. Agency for International Development (1986, cited in Lima et al. 1991) reported that fully 97.5% of all disaster-affected people in this century were in the developing world. Furthermore, disasters in developing countries are 10 times more likely to result in death than those elsewhere. These statistics make plain the need to understand the impact of disaster across nations and therefore cultures. Unfortunately, as Green (1993) pointed out, although there are some data accumulating about disasters across countries, few of those data speak to culture. Study results are also difficult to interpret because of wide methodological differences ranging from sample selection to assessment measures used. Nevertheless, a number of recent cross-national studies converge to establish that disasters have powerful and psychologically debilitating consequences across a number of ethnic groups and nations. Some recent studies are reviewed below.

After the 1989 Mexico City earthquake, de la Puente (1990) studied 573 people between the ages of 18 and 64 years. He reported that clinical interviews revealed that 32% had a diagnosis of PTSD, 19% had a diagnosis of generalized anxiety disorder, and 13% had a diagnosis of major depression. de la Puente additionally noted that some psychological "mechanisms" activated by the earthquake included a strong need for decisive leadership as well as strengthened feelings of bonding and cohesion. This study unfortunately did not report on a control group of unaffected people.

After flash floods and mudslides that left 180 dead in Puerto Rico, an experienced group of psychiatric epidemiologists (Canino et al. 1990) using the Diagnostic Interview Schedule reinterviewed (a year after the disaster) 375 people who had been part of an Epidemiologic Catchment Area (ECA) cohort studied a year before the disaster. The exposed group had significantly more depression, anxiety and PTSD than the nonexposed group. In a separate report on the same sample, Escobar et al. (1992) reported increased gastrointestinal and pseudoneurological symptoms among the exposed group.

This is a potentially important finding for investigations of culture and disaster because prior comparison of ECA samples to the Puerto Rico ECA sample indicated that the only difference was a higher rate of somatization disorder and a larger number of somatization symptoms in the Puerto Rico ECA. Also, as Escobar et al. (1992) pointed out, several somatization symptoms overlap with a culturally defined Puerto Rican disease entity known as *ataques de nervios* (attack of nerves). This disease was studied by Guarnaccia et al. (1993), who described it as a "culturally salient category for the expression of distress" (p. 164) and noted that the DSM symptom list needed to be expanded because it was not comprehensive enough to capture all the symptoms that establish *ataques de nervios*. By implication, the incidence of culture-bound syndromes may also increase after a disaster.

Lima et al. (1991b) reported on a study of mudslides after a volcanic eruption in Armero, Colombia. Lima and his colleagues were interested in the problem of delivering care for psychiatric disorders caused or exacerbated by a natural disaster in a developing country. They had fortuitously been engaged in helping the Colombian government to develop a plan for providing primary psychiatric care when the disaster struck. Lima and his colleagues fielded a two-stage study. They screened a sample of affected people using the SRQ to screen for psychiatric disorders. They followed up with clinician interviews of 102 people using DSM-III-R (American Psychiatric Association 1987) criteria. Lima et al. reported that 42% of the sample had PTSD and 13.7% had depression, whereas only 3% had generalized anxiety disorder. The low rates of anxiety were attributed to giving hierarchical priority to depression over anxiety.

Lima et al. (1991a) also studied a services-seeking, disaster-affected sample of 100 persons drawn from primary health care clinics using the SRQ. They found that 40% of the 50 patients interviewed after administration of the SRQ had a psychiatric disorder, 24% had PTSD, and 12% had anxiety disorders. These studies, unfortunately, did not include control groups.

Goenjian et al. (1994) reported on a study of survivors of the Armenian earthquake. The research group used a familiar epidemiological

strategy, screening for distress using the PTSD Reaction Index (Frederick 1987) with 179 adults. A group of 60 randomly selected subjects were interviewed with a DSM-III-R checklist. The severe and very severe categories on the PTSD Reaction Index correctly identified 88% of the subjects who met criteria for PTSD. Interestingly, when the authors focused on the most discriminating items, three items correctly identified 95% of those who had PTSD and 90% of those who did not. The items were intrusive thoughts, reliving the experience, and psychological reactivity. The predictive power of these intrusion domain items tends to support McFarlane's assertions (1992) about the primacy of intrusive experiences in postdisaster phenomenology. Overall, 66.6% of the interviewed subjects had PTSD. Although no control group was studied, the investigators did an internal comparison: they contrasted affected groups using their physical distance from the epicenter of the earthquake as a rough measure of exposure. They found that symptomatology was related to degree of exposure. A similar design was used by Pynoos et al. (1987) in their report on children's experience after the same earthquake in Armenia. Faced with the problem of providing services to an extraordinarily affected population, these investigators used the Children's Post Traumatic Stress Disorder-Revised Instrument (CPTSD-RI) (Pynoos et al. 1987) as a screening measure. They reported that 90% of the children whose score on the CPTSD-RI was above 40 met DSM-III-R criteria when later interviewed clinically. Of the children who were given clinical interviews, 70% (n = 78) had PTSD by DSM-III-R criteria. PTSD frequency was greatest for the group closest to the epicenter of the earthquake.

Two other reports are worthy of note because they report on inspiring efforts at mobilizing resources to treat disaster-exposed children. Goenjian et al. (1994) described their efforts at responding to the needs of children after the earthquake in Armenia. They were able to mobilize some 45 mental health specialists and see nearly 10,000 children. An Italian report by Galante and Foa (1986) described similar efforts with school children and presented data to suggest that treatment was effective, though their measures would not stand up to scrutiny in a more formal treatment outcome context.

A study of another Italian sample is important because it addressed coronary heart disease factors and pointed the way to a potentially important methodological tool for cross-cultural studies of disaster. While doing a follow-up examination of a cohort enrolled in a study of coronary risk factors, Trevisan et al. (1992) were interrupted by an earthquake. As a result, some of their sample was screened pre-earthquake and some post-earthquake. They found that subjects screened after the earthquake had higher heart rates, serum cholesterol, and triglycerides. These results were independent of the baseline data and receded by the

time of the next follow-up examination (7 years after the quake). Measuring psychophysiology is a promising adjunct to address cultural aspects of disaster situations.

In summary, researchers have been focused on establishing that disasters have significant mental health consequences. There are no reports that assess cultural variables directly and distinctly from prevalence of distress and disorder. Furthermore, because there are pronounced methodological differences between studies, the rates of PTSD cannot usefully be compared. To contribute to our understanding of the relationship between culture and trauma, future disaster research will need to integrate culturally relevant measures with standardized assessment strategies.

Impediments to the Study of Trauma and Culture

The purpose of this section is to describe some of the reasons that research on culture, trauma, and PTSD has been relatively slow to mature. In the original anthropological context, culture once referred only to distinct groups and linked the practices of a group to its territory. More recently, we have become aware that subcultures can be said to exist with respect to the practices of ethnic minorities within larger social groupings, with respect to the practices of functionally organized groups such as the military, and with respect to the organizational cultures of corporate entities. We have also come to recognize that cultures can become weakened by disintegrative forces, including contact with other cultures. Power relations may be analyzed with respect not only to the relationships of individuals but also to the historical relationships prevailing between ethnocultural groups.

Despite this broadening of the applicability of the concept of culture, certain commonalities appear to continue to exist. Culture still appears to refer to the shared practices of groups that govern their relations to exploiting and defending a territory. Furthermore, cultures are defined by being transmissible not only within a group but across time and generations. Finally, they seem to serve to bond groups in a common purpose, thereby providing protection not otherwise available to individuals in response to threats to survival.

Ethnocentrism

The single most powerful impediment to the study of cultural influences is ethnocentrism. People tend to assume that their experience of the world is the world. In a sense, this assumption confuses the cognitive map with the world it depicts. This naive realism is reassuring to

people as it confers on their worldview a solidity that serves to increase their sense of psychological security.

It seems likely that ethnocentrism represents the vestiges of an ancient avoidance of strangers. Brown (1969) described this ancient pattern as it pertains to early Greece:

> In primitive Greece, as in other cultures where the basic unit of society is not the individual but the family or clan, religious and social institutions were strongly affected by distrust of the stranger, the member of an alien family group. Intercourse with strangers was surrounded with magical safeguards: meetings occasioned magico-religious ceremonies; points of habitual contact were regarded as hallowed ground; natural or artificial boundaries, where the friendly world of one's own kindred ended and the inhospitable world of strangers began, could not be safely passed without the aid of ritual. (p. 34)

Brown also pointed out that early stranger aversion persists in muted form, even in modern times. This ancient aversion seems to be reflected, even today, in the ethnocentric reactions of people to other cultures. It is also possible that this stranger avoidance is reflected in the developmental phase of stranger anxiety among children. Emergence from the cocoon of the familiar and safe can be aversive and frightening.

Ponterotto and Benesch (1988) noted that when faced with other races, and by implication other cultures, most people go through fairly predictable stages of reaction. According to Ponterotto and Benesch, there are four stages: preexposure, exposure, zealot-defensiveness, and integration. The preexposure stage is characterized by assumptions that the world is as one sees it. Cultural and racial differences are unacknowledged, denied, or framed in a subordinate relationship to one's view of the world. All too often at this stage of contact with other cultures, what is different is characterized as aberrant. Elements that are alien and different seem vaguely anxiety provoking. The temptation, therefore, is to deny either the importance or the very reality of cultural differences.

As people are exposed to cultural and racial differences, they experience substantial challenges to their preexisting schemata about the nature of the world. Their naive realism is challenged. Sometimes, this is exhilarating. For most, however, there can be a defensive recoil that takes different forms depending on the cultures involved. A particularly dramatic example of the intensity of the reactions that culture contact can provoke is the interpretation placed on the delivery of supplies by plane in the Trobriand Islands after World War II (Burridge 1960; p. xix). The islanders found the delivery of supplies by air so discontinuous with their expectations about the nature of the world that they interpreted the experience as a kind of manna from heaven. This view was so strongly held that it gave rise to the

famous *cargo cults*—the central premise of which was that the planes were gods bearing gifts.

One need not look only to traditional cultures for examples of difficulty integrating into one's worldview the importance of studying diversity. The landmark National Vietnam Veterans Readjustment Study included blacks and Hispanics in samples larger than their representation in the population only because of strong political pressures to ensure that these groups would be studied to document their service needs. Similarly, the inclusion of Asian Americans, Polynesian Americans, and Native Americans was so resisted that it took a special directive of Congress to implement a study of their experience of combat-related PTSD (Matsunaga study, PL 101-507).

Thus, it would appear that ethnocentrism can translate, perhaps largely unconsciously, into decisions about the relative importance of areas of inquiry. Ethnocentrism implies judgments about the relative importance of one's own group vis-á-vis other groups. Ethnocentrism, beyond its cognitive dimension, also translates then into a conflict for access to and exploitation of available resources. In the face of such powerful conscious and unconscious conflicts of interest, it is perhaps not surprising that pressure to include other ethnicities eventually becomes resolved at the level of political process and political negotiation in well-functioning systems.

Unfortunately, when political processes cannot contain competition between ethnic groups in multiethnic societies, extraordinary violence animated with a remarkable sense of righteousness can ensue. This has certainly been exemplified in the breakdown of the former Yugoslavia, which led to coining of the term *ethnic cleansing*, and in Rwanda, where the intergroup violence has been so extensive and claimed so many lives that some have compared it to the Holocaust.

Despite these strong pressures to retreat into a defensive, self-protective posture, other forces promote embracing the value of cultural diversity. Among these are scientific curiosity and the recognition that a common good can be served by understanding diseases better through studying their natural variation across cultures. Another major force propelling cross-cultural cooperation is the recognition that we all seek trade of material, intellectual, and artistic products across cultural boundaries to enhance our lives. It is this drive for trade—and the consequent increased opportunity for stimulation and well-being—that has taken us beyond the earliest stages of trade and evolved systems of law to guarantee safety when crossing the boundary of one's own group.

The Evolution of the PTSD Diagnosis

Another source of historical resistance to plunging into the study of culture and trauma has been the scientific evolution of PTSD as a diagnostic

category. PTSD is an emerging diagnostic entity, the validity of which is increasingly well established (Green 1994). However, only 20 years ago the very existence of the disorder was challenged by many eminent researchers and clinicians. In part, the skepticism about PTSD was a result of doubts about whether it was independent of better established diagnoses. For example, some observers were concerned that many of the symptoms described as an important part of PTSD overlapped with symptoms describing depression, as well as with symptoms associated with the anxiety disorders (Keane 1989).

Despite these birth pangs, PTSD has come to be recognized as a unitary diagnosis comprising predictable and recognizable sequelae of traumatic events (Green 1994). The development of the PTSD diagnosis also included the important task of consolidating a number of event-related psychological syndromes. For example, rape-related traumas had been considered a distinct entity. Similarly, the psychological impact of the refugee experience had become well recognized. Natural disasters were increasingly observed to comprise defined psychological sequelae. The increasing recognition of the relatively consistent and predictable characteristics of the psychological aftermath of exposure to extreme stressors served to initiate the inclusion of PTSD in DSM-III (American Psychiatric Association 1980), thus consolidating the various syndromes under a superordinate category.

As a result of concerns about the validity of PTSD as a diagnosis, and in the face of skepticism about its uniqueness, many in the field were extremely careful to study clearly defined catastrophic events using paradigms designed primarily to establish the diagnosis. At that time many felt that studying relatively frequent events (e.g., car accidents, medical illnesses) might have undermined the task of establishing the disorder. Similarly, study of conceptually complex problems such as the embedding of PTSD and trauma in the cultural context was likely premature until a consensus could be established about the descriptive characteristics of PTSD. The sharp, recent increase in interest in culture and race as they affect the development of PTSD and the experience of trauma would seem to signal a recognition within the field of psychotraumatology that we have matured enough to undertake the task of understanding the boundaries of PTSD and trauma by exploring their variations across a range of cultures.

PTSD and Trauma

There do exist some important challenges in implementing cross-cultural research on PTSD. Some conceive of such research as validating a prototypic model of the diagnosis. Usually, the DSM-IV criteria are taken to be the skeleton of a prototype for the response of people to catastrophic events. Such a perspective invites researchers to check off

symptoms and researchers then to assess whether the people meet the criteria across cultures. Although this is a useful enterprise, the subjective process involved may result in forcing round pegs into square holes.

Faced with substantial distress in an affected person subsequent to a trauma, some clinicians will fit the symptoms to the prototype to provide increased legitimacy for the patient's distress, whether to facilitate treatment or compensation. Obviously, this choice generates false-positive error. Conversely, others will be punctilious in following the criteria and fail to diagnose substantial distress because it does not meet the letter of the criteria. This choice generates false-negative diagnoses. Unfortunately, it is nearly impossible to evaluate the rates of error these biases generate thereafter because no gold standard can arbitrate these differences.

An alternative approach with other diagnostic groupings was pioneered by Davidson et al. (1989). This approach differs from the search for confirmation of a prototype in that a very large set of symptoms are identified, and subsequently a variety of classification techniques are used to search for associations between symptoms and events. It does not presume prematurely that a prototype primarily established in the West would be valid for other cultures. Furthermore, it implies that a higher order model may be developed that describes not only a larger family of symptoms as predictable sequelae of trauma, but also the cultural rules of transformation that may operate to modify the association and relative salience of particular symptom constellations. It is highly likely that these conceptual strategies will prove to be complementary.

Problems of Conceptual Equivalence

It is important to note that neither approach is exempt from the fundamental principles of cross-cultural psychiatric research: 1) linguistic equivalence, 2) metric equivalence, and 3) functional equivalence (Brislin 1983).

Linguistic equivalence refers to ensuring that translations of language indeed reflect the meanings intended. More broadly, however, we propose that linguistic equivalence needs to include a recognition that communication does not simply contain semantic messages, but is itself contained in a set of rules that specify limits of disclosure, patterns of deference, and other substantial rules of interaction in which the semantic message is embedded.

These rules can override the semantic content of a communication. For example, it may be highly impolite to share with a stranger "negative" information for fear of offending him or her and causing shame to one's group. This would result in denying a range of experiences that were nonetheless present. Other people may systematically underreport the intensity and frequency of symptoms, resulting in

false-negative diagnoses. Still others, by virtue of cultural style, may be highly expressive and dramatize their experiences, resulting in a higher prevalence of disorder being recorded.

Metric equivalence refers to ensuring that the number we assign to a particular value of a construct has the same meaning when translated across cultures. The response style of people differs intraculturally and must normally be taken into account as a source of error variance. However, when response style is systematically modified by cultural factors, it creates a systematic response bias that can grossly distort the character of findings. Therefore, an important task for clinicians and researchers alike is to evaluate and correct for response biases as a result of systematic differences in the assignment of measurement values.

Functional equivalence refers to conceptual similarity. It implies a duty to ensure that referenced categories of experiences are functionally equivalent across cultures. With most psychiatric disorders, it is so difficult to achieve this goal that clinicians and research workers typically accept the error implicit in the prototype validation model. Because the traumatic event is a central marker for the diagnosis of PTSD, it is possible and practical to evaluate native conceptions of the aftermath of catastrophic events. Such an effort could result in discovering a substantial number of culture-specific categories of response, as well as serving to validate the DSM symptoms of PTSD. An example of such categories would be the *ataques de nervios* concept referenced above in my review of the natural disaster literature.

Trauma and Chaos

Another important restraint on cross-cultural investigation of PTSD and trauma is the fact that traumas that affect a large number of people (e.g., war, natural disasters, the large-scale creation of refugees) typically are associated with highly chaotic social and political environments. In that sense, the trauma researcher working across cultural lines, in settings where catastrophic events are either ongoing or have just occurred, is not unlike a foreign war correspondent. Studying the development of PTSD in children in Bosnia for a stranger is likely fraught with significant probability of danger.

Similarly, to study the details of human misery after natural disasters in Third World countries, which often claim thousands of lives, creates both logistic and potential ethical problems. Even in the United States and other highly industrialized countries, it is difficult to gain access to disaster areas in the immediate postdisaster environment, even when one is properly credentialed and when few lives have been lost. The problems are compounded in Third World countries, where casualties are often in the thousands, where one does not have long-standing

relationships to facilitate access, and where the recovery infrastructure is overtaxed with the immediate demands of physical recovery.

In addition, as experienced postdisaster workers will recognize, there is considerable sensitivity among victims to the intrusiveness of people from the outside. Victims often feel exposed and vulnerable. In that state, improperly carried out research efforts can easily be perceived as exploitative. This effect is magnified when the research effort is not part of a service delivery effort that provides substantial direct benefit to the affected population. It is also true that some researchers may well perceive an ethical dilemma when confronted with intense and immediate needs for help while being constrained by a research purpose.

Finally, in addition to realistic concerns for one's physical safety and well-being, war and disaster environments are emotionally intense and can provoke strong reaction in workers and researchers. Clinicians who have only worked in the office or clinic with traumatized patients may recall how deeply affecting it can be to simply listen with empathy to traumatic experiences. Imagine such events unfolding all around for long periods of time, as well as the magnifying effects of emotional contagion and the physical discomforts of disrupted living circumstances where food, water, and proper shelter may be difficult to obtain. The chief path to remedying these problems is 1) having relatively established relationships before a disaster, 2) providing tangible resources for recovery as a cost of entry, and 3) firmly allying oneself with a respected insider, whose endorsement serves as a moderator of the ethnocentric tendency to exclude outsiders.

Economic Factors

An additional impediment is the potentially large cost of multinational trauma research efforts. Such studies require the establishment of research networks ready to spring into action when catastrophic events occur. They also require extraordinary cooperation across both national and cultural lines. Often, training costs are high. Such efforts also require a substantial investment in developing conceptual clarity about the relationship of culture to trauma and PTSD. Another impediment linked to economics is the large differences in economic resources across cultures and, therefore, the significantly different priorities accorded to psychological factors in recovery.

Factors Favoring the Study of Culture and Trauma

Studying trauma and PTSD across cultures provides an excellent opportunity to determine the universal versus the culture-specific aspects of trauma. For example, rapes occur in most, if not all, human societies.

What are the different patterns of defining when a rape has occurred? What are the consequences to rapist and victim? How does the victim experience the rape? How much social support is extended, what are the patterns of recovery, and what are the attributions about responsibility? The same questions may be raised about war and disaster. Interestingly, because traumatic events are by their nature so salient, they tend to bring about highly defined responses that reveal much about the event and its impact, but also serve to highlight the underlying cultural principles in which the experiences are embedded. Thus, collaborations between anthropologists and trauma researchers are likely to be of significant benefit to both disciplines.

In addition, the study of trauma across cultures requires collaboration with colleagues who belong to that culture, so that as part of their work they may serve as informants and provide access to the culture. Thus, the studies required to elucidate the nature of trauma are likely to support the development of multinational and multicultural alliances. Because trauma research often requires a service component to be maximally effective, it is likely that these collaborations will emerge not only as a research-capable network but also as the nucleus of a global disaster response network. Such collaborations then would enhance cooperative responses to catastrophic events.

Finally, in the face of increasingly multicultural-multiracial societies, a homogeneous conception of the nature of trauma will be rejected by patients who experience ethnocentrism as a rejection of their experience. With respect to creating accessible care, the failure to appreciate differences in cultural expression of trauma can be as sure a barrier as a wall. This potential problem in regard to access is magnified because trauma victims are often prone to avoid treatment. Once a treatment request is initiated, it is imperative—if a treatment alliance is to develop—that the patient feel understood and that his or her uniqueness be appreciated. Thus, effective and accessible treatment for traumatized patients in multicultural societies can no longer be based on theories of trauma that are not capable of specifying the impact of culture on trauma.

However, in the end, the most compelling reason to address trauma and PTSD across cultures is that catastrophic events do not recognize national or cultural frontiers. People who experience traumatic events often experience pain and disability. Because multicultural and multiracial societies are becoming the norm, we must become competent in crossing cultural boundaries to be effective healers.

A Preliminary Conceptual Framework

Although Kleinman (1988) and others (e.g., Gaw 1993) advanced our understanding of the general issues that bear on the relationship of

culture to psychopathology, our conceptual understanding of the relationship between culture and trauma is in its infancy. A *rudimentary* framework to invite further conceptual inquiry is proposed here.

PTSD and Survival

My colleagues and I have proposed that PTSD is a disorder that arises as a result of the maladaptive resolution of the challenge of an event that is life threatening to either the self or to a loved one. Such an event leads to the activation of a survival system within people that is specialized to support coping with life threats. Thereafter, PTSD arises because of the context-inappropriate (and therefore maladaptive) reactivation of the survival system (Chemtob and Carlson 1994, Chemtob et al. 1988). The survival system includes two major components that subtend the response of people to life-threatening events:

1. A threat detection and response system
2. A social attachment–mediating system

Thus, for individuals to survive they must depend on two kinds of competence:

1. The ability to manage threats as individuals
2. The ability to belong to a group and thereby to benefit from the group's strength and support

We have argued that deficits in regulation of the threat detection system give rise to anxiety spectrum symptoms, and deficits in the regulation of the social attachment system give rise to affective disorder spectrum symptoms (Chemtob and Carlson 1994).

We propose that, for our purposes, culture is a territorial group's shared cross-generational wisdom with respect to threats to the survival of group members and of the group. In turn, such threats to survival for groups are directly related to the exploitation of primary resources for survival: that is, territory and its potential for generating food and, historically, the reproductive potential represented by women. An important function of culture, then, is to protect the group by moderating the impacts of traumatic events such as war, natural disaster, and rape.

Such cultural protection acts to reduce the negative impacts of trauma on the group's fitness and seeks to reduce the likelihood of trauma by providing prescriptive guidelines for experiencing potentially traumatic events that specify the behavior expected of both affected and nonaffected group members. These cultural guidelines describe in particular the behaviors that give rise to social support and those that have the potential of leading to social ostracism. Because social ostracism reduces fitness, cultural sanctions bearing on survival behaviors are *self-enforcing*.

Our model focused on cognitive networks following Lang's description (1979) of bioinformational representations. Like Lang, we posited that schematic representations of events include response information, event characteristics, and affect. We now propose that these schemata also encode information about the social consequences of activating a particular representation. This information is salient within a schema because it has multiple survival-related links as a consequence of encoding information about social inclusion.

Schemata that bear on survival, and therefore on the experience of potentially traumatic events, are endowed with several important characteristics:

- They have relative *primacy* in situations in which threats invoke them.
- They become *salient* in survival contexts, preempting other schemata.
- Although they are amenable to conscious exploration, when activated they operate as *automatic nonconscious organizers* of perception and behavior.

Culture's influence on trauma can be traced, for example, by investigating 1) the schemata that relate information about the relationship between a threat and social support and 2) the schemata that specify the rewards to be gained by sacrifice for the benefit of the group's fitness. The schemata and prototypes that bear on expectations and response to survival threats can be investigated by asking questions such as, "In your group (culture/society) how are people expected to deal with the experience of being raped? How are people supposed to feel about a person who has been raped?" These kinds of questions allow the exploration of schemata in nonsurvival contexts, where they are accessible to consciousness. In survival contexts, as well as during posttraumatic exploration by clinicians, these schemata are less readily available *because they are fused in the experience of the event itself* and do not have for the traumatized person the quality of standing separately from that person's experience of the trauma.

Three Types of Culture and Trauma Interaction

We can distinguish at least three types or classes of culture and trauma interactions:

1. Comparison of distinct cultures can help determine the kinds of events that are experienced as traumatic across cultures, the character of the responses to traumatic experiences, and the resolution of such events.
2. Considering the interaction of a majority culture and a minority culture is a distinct level of analysis that can help clarify the impact on individuals of belonging to one culture while being embedded in a different host culture when they are exposed to a traumatic event.

3. A third level of analysis is the impact on the ongoing health and well-being of members of a culture overrun by a conquering, territorially exogenous cultural group (e.g., Native Americans).

Each of these situations is conceptually distinct and gives rise to different inquiries. The first problem is best approached by considering cross-cultural variations in the response to events considered traumatic. Areas of investigation that would characterize this problem include 1) an evaluation of the consistency across cultures of what constitutes a traumatic class of events, 2) the consistency of symptom structure after the occurrence of an event deemed traumatic across multiple cultures, and 3) the cultural prescriptions that govern and specify the path to recovery from a traumatic experience.

The second problem reflects the interaction of two cultures. Areas of investigation that would characterize this problem include 1) the impact on trauma victims of being isolated from their primary culture when exposed to trauma and 2) internal conflicts experienced by members of the minority culture when called on to function as if they were members of the majority culture.

The third problem gives rise to questions about the impact on a people's health and well-being of being conquered and having their culture degraded by the imposition of the cultural values of a dominant new culture. An example of this problem is the impacts on aboriginal groups of conquest by exogenous groups. Hawaiians, for example, had an exquisitely adapted culture that was supplanted gradually by the introduction of American and European culture. Although elements of Hawaiian culture remained alive, for many years the Hawaiian culture was derided to the point that even many Hawaiians embraced the derogatory views that the newly dominant group held about them. In terms of the present analysis, the dying of a culture reflects the adaptive decline of a population.

Although Hawaiians are today marshalling a cultural renaissance, they remain a disadvantaged group with respect to health and economic well-being. Questions that arise in this context include 1) whether there is more susceptibility to the impact of traumatic events in individuals with culturally diffuse identities versus those with intact cultural identities and support systems and 2) what the relative importance of multicultural competence is in recovery when one is a member of a cultural group that has been traumatized by contact with another cultural group.

Culture Modifies Core Processes

The proposed framework assumes a universal set of stages sequentially involved in the experience of a trauma (see Figure 11–1). In turn, each stage is affected by cultural schemata shaping the culturally specific

response to a given traumatic event. His proposed that culture's impact on the development of PTSD reflects the interaction of stages in the natural course of experiencing a traumatic event with culturally immanent (i.e., widely, consensually, and cross-generationally held) schemata that prescribe reactions to survival-related events. Thus, the natural course of experiencing a potentially traumatic event would be expected to be universal, including the perception and interpretation of an event, the expression of symptoms, the resolution of symptoms, and mechanisms for diffusing for the social good information obtained in the course of negotiating a traumatic experience.

The dominant information would be specifically contextual and would be provided by cultural schemata intended to serve a protective function with respect to such events. Such cultural schemata about construing events key to survival are taken to be nearly self-evident by members of the cultural group and are acted on as if they were dictated by the natural order of things. This both enhances their protectiveness because of the validity attributed to them and reduces the naive observer's readiness to accept the notion of cultural relativity. Some examples are provided below.

Perception and Interpretation of Trauma

The perception of what is traumatic is strongly influenced by cultural dictates. For example, whether or not a disaster is perceived as traumatic is influenced by whether or not the culture perceives such events as discontinuous from expectations. The perception of a drought as an event is significantly affected by fatalism. If the culture carries within it information that droughts are as much a part of the natural world as the change of seasons is in other environments, then droughts will be accepted as inevitable. To illustrate this point with an example familiar to many readers, severe winters are extremely stressful for people unaccustomed to them, whereas they are part of the rhythm of life for those who expect them.

Consider too the impact of different culturally based interpretations of events. In Japanese traditional culture, a failure of duty could become the trigger for *seppuku*, ritual suicide, by which such a shame could be expiated. The events sufficient to cause such shame in the Japanese culture bear principally on the maintenance of properly organized clan structure, and by implication on the capacity to properly defend the clan. Nevertheless, those events would almost certainly not be sufficient to cause suicide in a Westerner. The interpretation of an event is embedded in a social context, whereby its intensity and character (perception) and its significance (interpretation) are culturally prescribed in the context of socially powerful forces. These forces are ultimately

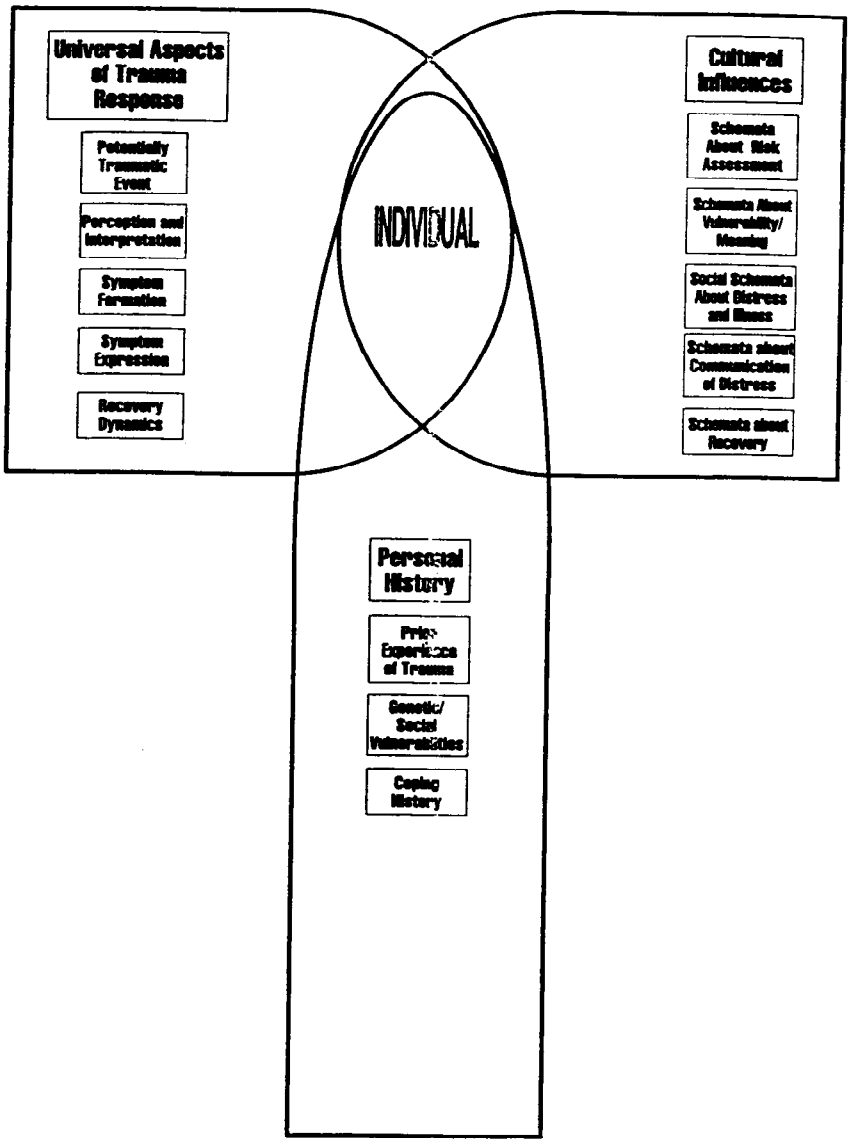

Figure 11–1. Multidimensional model of culture and trauma.

enforced by inclusion or exclusion from a social group. In turn, the sanction of social ostracism is highly consequential with respect to survival for human beings.

A example recently in the news exemplifies the dramatic impact of culture on the perception and interpretation of events: the cultural

practice of female genital mutilation, which is still carried out in certain parts of Africa. This practice involves the clitoral circumcision of adolescent girls. There appears to be no doubt that this practice is painful and is associated with significant public health risks for the affected girls, and yet it has survived these major disincentives. The practice is psychologically repulsive and morally abhorrent to the great majority of Westerners. Yet, even as Western voices are raised in condemnation, some African women have raised arguments of support and grounded their arguments on the functional value of the tradition to their society and culture. Some have also criticized Westerners for ethnocentrism.

This situation is cited because it so dramatically exemplifies the power of cultural expectations to modify both perception and interpretation. There is little question that if genital mutilation of an adolescent girl were to occur in the West, it would be universally recognized as a traumatic experience and most probably as a criminal act. Nor is there much doubt that, independent of culture, the procedure would be painful. However, when taken within its cultural context, the experience appears to be greeted with a mixture of dread and of positive anticipation that it will confirm the young girl's sexual and reproductive value, thus materially affecting her future prospects for a "good" life.

It is of some interest to note that the perception of an event is confounded with its cultural interpretation. This point bears on the recurrent diagnostic controversy with respect to what constitutes a traumatic event. This problem has been highly contentious because it involves a dispute between those who believe that events in and of themselves are traumatic and those who argue that for an event to be traumatic it must engender particular classes of response (primarily a threat to one's life or to the life of a loved one). The above discussion implies that a culturally relativistic analysis would perforce weigh in with the group that puts great weight on the importance of accounting not only for an event's characteristics but also for its psychological impact.

The analysis in this chapter extends this position to argue that the events identified as traumatic *and* the interpretation of these events both vary across cultures. Thus, culture could be said to protect its members from trauma by creating perceptual and interpretive frames within given human ecologies that condition 1) expectations of discontinuity and 2) interpretations of threat that embody the management of that threat. Such a protective function requires a historical link to the territorial frame of reference of a particular human ecology to be maximally effective. In times of rapid cultural changes, it is likely that these protective features of culture against potential trauma would greatly weaken because of the dissolution of enduring direct bonds between humans and territory.

Expression of Trauma Symptoms

An important issue in studying any psychological disorder across culture is determining which symptoms express the disorder. This question is obviously extremely important because it bears on the nosological definition of the syndrome. It is obviously necessary to determine whether symptoms of PTSD are consistent across ethnocultural groups as a prelude to case finding and to treatment.

In the case of PTSD, a substantial number of symptoms are culturally embedded. To admit to symptoms at all, in some cultures, would reduce the fitness of the affected individual. Consider, for example, the returning warrior. A warrior back from the battlefield, whether victorious or vanquished, is making a statement about the fitness of the group as a whole.

In Japan, war was traditionally associated with highly evolved codes of conduct, or *bushido*, that served to prescribe appropriate displays of behavior and emotion. Failure to conduct oneself in accordance with these codes was dishonoring of self and clan. Such failure, including presumably the display of PTSD symptoms, would lead to extraordinarily negative sanctions. By way of exemplifying some of the costs of weakness in battle, consider the Ronin in feudal Japan. In Japan, the retainers of a lord vanquished in battle became social outcasts—Ronin. It is, therefore, perhaps not surprising that shame would signal any impending displays of weakness in the Japanese culture, because shame is a signal of potential social embarrassment and rejection.

This set of cultural expectations might systematically alter the display of emotional symptoms, as well as the reporting of such symptoms. Thus, a Japanese person exposed to a traumatic event would be more likely to fail to display—or report—the symptoms listed in DSM-IV reflecting the psychological consequences of exposure. Conversely, in some cultures relatively exaggerated displays of emotionality are valued. Perhaps these displays permit reaffirmation of the bonds of social connection through systematic exchange in the form of providing resources to one another in case of need. Such "exaggerated" displays of symptoms in the service of soliciting succor would lead to symptom overrepresentation.

In some cultures, these biases in expression and reporting would differentially affect men and women. In many Middle East cultures, a raped woman is seen as profoundly devalued. Again, the woman's fitness would be very negatively impacted by disclosing the fact of the rape, her reactions to it, and perhaps the mere fact that she had any reactions at all. Paradoxically, cultural pressures for retaining fitness can enhance the motivation of afflicted individuals to work through symptoms privately. For those for whom this process works, fitness is reestablished.

A culturally naive approach to diagnosis would not only lead to systematic underestimates or overestimates of prevalence, but also would be self-perpetuating. This is because culturally accurate assessment requires 1) an exhaustive survey of possible dysfunctions associated with the psychological systems thought to be disrupted by PTSD and 2) an appreciation of the modulating functions associated with symptom expression within given cultures. No self-corrective loop exists when diagnosis relies on the naive-realism assumption that psychological symptoms are either present or absent, because the "existence" of a psychological event depends on a range of psychological, social, and cultural influences.

Recovery from Trauma

Another way in which culture can be protective is by specifying the path to recovery subsequent to experiencing a trauma. Returning to the Japanese Ronin, a famous story enshrined in the Japanese romantic imagination concerns the 49 Ronin. These 49 men were Samurai whose lord had fallen in battle. Rather than slink away as defeated individuals, the band of Samurai made a heroic last stand together—the sole purpose of which was to restore and memorialize their lord's honor. Thus, through devotion to duty and personal sacrifice, they affirmed the honor of their lord and therefore their own. This triumph of dedication to honor, futile as it may seem to other cultures, won them a place in Japanese mythic tradition because it memorializes key cultural prototypes about he nature of social bonds.

In Polish tradition, an important cultural principle that guides recovery bears on an immanent appreciation that the Polish territory has been repeatedly subject to conquest. In the course of this conquest, women are raped and the land is pillaged. The path to recovery bears on enshrining the values of endurance, patience, and resilience. One is evaluated by how many times one can get up after being knocked down. Here again, the cultural imperative provides guidelines that are perfused throughout the society and that enshrine resilience as a beacon of the behaviors that will increase that particular population's fitness.

Trauma as an Agent for Culture Change

The resolution of a traumatic experience requires considerable investment by individuals in the processes of assimilation and accommodation. Similarly, cultural groups are challenged to make sense of traumatic experiences. Among the most primitive functions of trauma in a cultural context is to provide information about the world through harm to one or many individuals for the benefit of the group. For example, the warrior who

survived a battle, at considerable personal cost to himself, can transmit information about the enemy's battle dispositions that may benefit the group in later encounters. Similarly, the cost incurred by a warrior is a potent lesson about the direct costs of war, which can act to regulate the likelihood (probability) of future conflicts. Such information transfer, both latent and explicit, serves to increase the fitness of the group. Furthermore, as societies evolve, the mechanisms of information diffusion may change, the symbolic abstraction may increasingly become detached from direct communication, but the basic nature of the fundamental messages do not change.

Consider two powerful examples in North America of the trauma-induced cultural change mechanism postulated in this section: the Vietnam war and the AIDS crisis. The Vietnam war, like other wars before it, became an important subject for movies. These movies explored issues of particular moment for our society, including the cost of war, the redemption inherent in love, the cost of social divisions in the face of an enemy, and finally the healing power in remembering our dead together. On another level altogether, the Pentagon evolved a new war doctrine. This doctrine recognizes not only a new military imperative (strike them decisively, not incrementally), but also shows an impressive understanding that an agreed-on national interest is a prerequisite for going to war. Finally, in a concession to the power of the media to weaken national resolve, the new doctrine restricts the media's power to diffuse contemporaneously the physical and emotional horror of war.

Similarly, the horror of AIDS and the pain it engenders have become prime movers in bringing gay people into our national mainstream to an unprecedented degree. Nothing is more persuasive for the purpose of forging a common identity than a common enemy. For gay people, the common enemy, which served to remind us that we are all susceptible, is the HIV virus. The recognition of the communality in common vulnerability has entered, and continues to enter, the cultural mainstream through a multitude of information channels. The theme common to both Vietnam and AIDS is that in each case a subgroup is communicating to society as a whole about a threat. Each death validates the reality of the threat, and each death is an early warning for our society and culture's benefit.

Conclusions

This review suggests that although there is fast-growing interest in the impact of cultural variables on trauma and PTSD, the field is still in a very early stage of development both conceptually and methodologically. To further the field, I believe the most pressing need is to create

an international consensus about research methodology as a prelude to fielding an international trial similar to the World Health Organization studies of schizophrenia and depression.

This kind of methodological consensus development with respect to trauma has occurred most notably in the area of research on combat-related PTSD. The work of Keane et al. (1987) suggested substantial agreement that proper assessment requires meeting the following standards:

1. The traumatic event needs to be clearly specified and evaluated with respect to both its independent characteristics (event) and its impact on the person (response).
2. A multimethod approach is needed to assess the impact of the event. This means that clinician ratings based on structured clinical interviews should be conjoined with psychometric measures and self-report data.

Psychophysiological measures are also increasingly becoming part of the standard assessment of the impact of the trauma. Clinical interviews now routinely incorporate both frequency and intensity ratings of symptoms. Ratings of disability should be added. These methods need to be amended to extend to key traumatic events other than combat-related PTSD.

However, although a required first step, developing methodological consensus about cross-cultural PTSD research would not be sufficient to allow us to systematically explore the nature of culture's impact on trauma and PTSD. To do so, we would also have to document the cultural schemata that influence traumatized people by cross-analyzing both traumatized and nontraumatized persons' reports on such schemata. In turn, gathering such data would allow us to construct classes of variables representing the types of cultural schemata that are encountered. As a result of elucidating these variables, we would have an opportunity to control empirically for cultural-schema variables as they affect the development of trauma and PTSD.

Clinicians cannot afford to wait for the results of the kind of research outlined above, nor do they need to wait. The preliminary conceptual framework proposed in this chapter suggests that clinicians must ask traumatized patients not only about the event and consequent symptoms, but also about the specific cultural schemata that govern experience within the group of origin, as well as within the groups with which patients identify.

Failure to assess such schemata reduces both the clinician's capacity to understand and his or her effectiveness. For example, treating a patient who was raped during the course of a military invasion requires not only working with the generic aspects of such trauma, but also with culture-bound prescriptions about its meaning. For example,

a Kuwaiti woman raped by an Iraqi soldier contends not only with the rape, but also with the extremely negative impact that such an event traditionally confers not only on her but on her whole family. Consequently, to seek help is a disclosure of a harm that compounds the rape with a second wound. In addition, the mixed reactions engendered in her family would both reinforce the cultural schema about rape and its disclosure and deprive her of unambivalent social support. Such internal contradictions ultimately require therapists to be healers who not only address the pain of individuals, but also act to identify and transform cultural schemata impairing the adaptive capacities of a group to tend its own.

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